

EXPLANATION

- Lode deposits—Numbers refer to table**
- ▲ Massive sulfide, sedimentary exhalative Zn-Pb, carbonate-hosted Cu, and bedded barite deposits
  - Sandstone U, and felsic plutonic U deposits
  - Vein and replacement deposits, including basaltic Cu, hot-spring Hg, epithermal vein, Au quartz vein, Cu-Ag quartz vein, polymetallic vein, and Sb-Au vein deposits
  - Sn, greisen, Sn vein, and Sn skarn deposits
  - Cu-Zn-Pb (± Au, Ag), Cu-W, Mo, and Fe skarn deposits
  - Porphyry Cu, Mo, and Cu-Mo deposits
  - Deposits related to mafic and ultramafic rocks, including gabbroic (± Cu), zoned mafic-ultramafic (± Cu, Pt, potfium chromite, and serpentinite-hosted asbestos) deposits
- Boundary between geographic regions**
- Contacts**
- Terrain-bounding fault—Dashed where approximately located; dotted where concealed
  - Postaccretion or postamalgamation contact—Includes both depositional contacts and faults that are not terrain boundaries

SUMMARY OF SIGNIFICANT METALLIFEROUS LODE DEPOSITS OF ALASKA  
(For more detailed explanation of abbreviations, see explanation of tabular headings in text)

Number	Name	Major metals	Type	Estimated tonnage and grade—Production
NORTHWESTERN BROOKS RANGE				
B81	Lis	Zn, Pb, Ag	Sedimentary exhalative Zn-Pb	25 million tonnes grading 0.8% Zn, 1.0% Pb, 34 g/t Ag
B82	Red Dog Creek	Zn, Pb, Ag, Ba	Sedimentary exhalative Zn-Pb	85 million tonnes grading 17.1% Zn, 5% Pb, 82 g/t Ag
B83	Kromskol	Zn, Pb, Ag	Bedded barite	About 1.5 million tonnes barite
B84	Drenthor	Zn, Pb, Ag	Sedimentary exhalative Zn-Pb	Samples with 11% Zn, 2% Pb, 150 g/t Ag
B85	Jayhawk Mountain	Cu, PGE	Podiform chromite	130,000 to 350,000 tonnes chromite
B86	Keon	Cu, PGE	Podiform chromite	200,000 to 600,000 tonnes chromite
B87	Mishakog Mountain	Cu, PGE	Podiform chromite	110,000 to 350,000 tonnes chromite
B88	Sitka Mountain	Cu, PGE	Podiform chromite	Sample with as much as 21% Cu, 0.2% Ni, 0.07 g/t Pt, 0.1 g/t Au
B89	Stary Creek	Pb, Zn, Ag, Au	Unclassified Pb-Zn-Ag vein	Samples with as much as 1.5 to 34% Pb, 1.5 to 50% Zn, 3% Ag, 0.4 g/t Au
B90	Shoop Creek	Zn, Ag, Au	Unclassified Zn-Ag vein	3% to 94% Zn, and 1.2 g/t Au
B91	Shar	Cu, Zn, Ag	Violent Pb-Zn vein	Samples with 15.3% Cu, 0.14% Pb, 0.9% Zn, 20 g/t Ag
B92	Frost	Cu, Zn, Pb, barite	Unclassified Cu-Zn-Pb vein	One vein with 13.2% Zn, 0.5% Cu, 21% barite
SOUTHERN BROOKS RANGE				
B93	Shearer	Cu, Zn, Pb, Ag, Au	Kuroko massive sulfide	Average grade of 1 to 5% Pb, 5 to 10% Zn, 103 to 343 g/t Ag
B94	Arctic	Zn, Cu, Pb, Ag, Au	Kuroko massive sulfide	32 million tonnes grading 4.0% Cu, 5.5% Zn, 1.0% Pb
B95	Jerry Creek	Cu, Zn, Pb, Ag	Kuroko massive sulfide	No data
B96	Ruby Creek	Cu, Zn, Ag	Kipushi Sn-Pb-Zn	91 million tonnes grading 1.2% Cu, 4.2 million tonnes grading up to 4% Cu
B97	Sun	Cu, Zn, Pb, Ag	Kuroko massive sulfide	Average grade of 1 to 4% Pb, 6 to 12% Zn, 0.5 to 7% Cu
B98	Ann	Pb, Zn, Ag	Polymetallic vein or metamorphosed sulfide	103 to 343 g/t Ag
B99	Rosewell	Cu, Zn, Pb, Ag, Au	Polymetallic sulfide	No data
B00	Nichigan	As, Au, Ag, Cu, Zn	Kuroko massive sulfide	Samples with as much as 8.2% As, 0.3 g/t Au, 3.9 g/t Ag
CENTRAL BROOKS RANGE				
B01	Mr. Lygbot and Arrigetch Peaks	Cu, Pb, Zn, Ag, Au, Sn, W, As	Polymetallic vein, Au quartz vein, Sn-Pb-Zn and Sn skarn	Samples with as much as 5% g/t Au, 150 g/t Ag, 0.5% Pb, 0.1% Zn, 0.1% Sn, 0.05% W, 0.02% As, 0.1% Sb
B02	Lost River	Cu, Ag, Mo	Sn skarn	Samples with as much as 1.7% Mo, 1.7% Ag
B03	Victor, Venus, Evelyn Lee, Ebo	Cu, Ag, Mo	Porphyry Cu and Cu skarn	Zones in granitic rocks with as much as 0.4% Cu, 0.29 g/t Au
B04	Jaw-Bontaw	Cu, Zn, Ag, Pb	Cu-Zn skarn	No data
B05	Geror Creek	Porphyry Cu-Mo	Porphyry Cu-Mo	Zones in granitic rocks with as much as 0.6% Cu, 0.02% Mo
B06	Chandler District	Au	Au quartz vein	45,000 tonnes grading 80 g/t Au
NORTHWESTERN BROOKS RANGE				
B07	Estok Glacier	Pb, Zn, Sn, Cu, W	Pb-Zn skarn	Samples with as much as 0.03% Sn, 0.15% W
B08	Porcupine Lake	Cu, Zn, Pb, Mo, Sn	Polymetallic vein, Pb-Zn skarn	Samples with as much as 0.02% Sn, 0.2% Ag
B09	Romanoff Mountain	Cu, Zn, Pb, Ag	Polymetallic vein	Samples with as much as 0.15% Sn
B10	Beaver Mountain	Cu, Zn, Pb, Ag	Polymetallic vein	Samples with as much as 0.02% Sn, 0.4% Ag
B11	Galena Creek	Cu, Zn, Pb, Ag	Polymetallic vein	Samples with as much as 21% Cu, 3.5% Zn, 1.3% Pb, 170 g/t Ag
SEWARD PENINSULA				
S1	Pogo Mountain	Sn, W	Sn vein	Produced several hundred tonnes Sn
S2	Capote Mountain	Sn, W	Sn vein	Samples with as much as a few percent Sn
S3	Lost River	Sn, W, Fe, Rn, Zn	Sn skarn, Sn skarn, Sn greisen	25 million tonnes grading 0.1% Sn, 0.03% W, 0.03% Rn, 320 tonnes Sn
S4	Ear Mountain area	Sn, W, Fe, Rn, Zn	Sn skarn	Produced several hundred tonnes Sn
S5	Koopack	Sn, W, Fe, Rn, Zn	Sn greisen	Average grade of 0.5% Sn, 0.01% each of Fe and W
S6	Sargeant Mt.	Pb, Zn, Ag, Au	Polymetallic vein	No data
S7	Springs	Pb, Zn, Ag, Au	Polymetallic vein	About 300 tonnes grading 1% Pb, 0.00% g/t Au
S8	Windy Creek	Pb, W, Sn	Porphyry Mo	Samples with as much as 0.15% Mo, 0.05% Sn, 0.05% W
S9	Independence	Pb, Ag, Zn	Polymetallic vein	Samples with as much as 30% Pb, 5.15% g/t Ag, 3.4 g/t Au
S10	New district	Au	Au quartz vein	Samples with as much as 120 g/t Au, 10 g/t Ag, 0.2% Au
S11	Big Birch	Au	Au quartz vein	Average grade of 0.1% Au, 0.01% Ag, 0.01% Au
S12	Danville Creek	Au	Au quartz vein	9 g/t Au
S13	Eagle Creek	U, Th, REE	Felsic plutonic U	Samples with as much as 0.15% U, 1.05% Th, 2% REE
S14	Death Valley	U, Th, REE	Felsic plutonic U	450,000 g/t U, average grade 0.1% U, 0.1% Th, 0.1% REE
S15	Hannu Creek	Pb, Zn, Ag	Metamorphosed sulfide	Samples with as much as 10% Pb, 2.2% Zn, 1.4 g/t Ag, 60 g/t Au
SOUTHWESTERN KUSKOKWIM MOUNTAINS, WEST-CENTRAL ALASKA				
W1	Kapek Lake	Sb, Hg	(Sb-Hg vein)	No data, minor production
W2	Kemul Mountain	Fe, U, Th, REE	Zoned mafic-ultramafic	2,200 million tonnes grading 15 to 17% Fe, 2 to 3% Th, 0.01% U, 0.01% REE
W3	Cinnabar Creek	Sb, Hg	Hot-spring Hg	Produced about 500 flasks from selected high-grade ore
CENTRAL KUSKOKWIM MOUNTAINS, WEST-CENTRAL ALASKA				
W4	Fortyseven Creek	Au, W	Polymetallic or Au quartz vein(?)	Samples with as much as 17.2 g/t Au
W5	Taylor Mountain	Au, W, Ag, Hg	Hot-spring vein(?)	See tab. 10
W6	Red Devil	Hg, Sb	Hot-spring Hg	Average grade of 1.5% Hg and 2% Sb. Produced 31,145 flasks from 16,230 tonnes grading 19% Hg, 2% Sb
W7	Mission Creek, Delet	Au, Ag, Cu, As, Sb	Polymetallic vein	Samples averaging 6.4 g/t Au, 53 g/t Ag, 2.5% Cu, 3.0% As
W8	DeCoursey Mountain	Hg, Sb, As	Hot-spring Hg	Samples with 6.5% Hg. Produced 1,200 flasks
W9	Stow Gulch	Sb, Au	Pb-Au vein	Samples with 31 to 82 g/t Au and as much as 4% Sb
W10	Chicken Mountain	Au, W, Hg, Sb	Polymetallic vein(?)	Stockwork with as much as 0.9 g/t Au
W11	Golden Horn	Au, Ag, W, Hg, Sb	Polymetallic or Sb-Au vein	Golden Horn: produced 400 tonnes grading 1% Au, 1% Ag, and as much as 20% Sb
W12	84,000 tonnes grading 17% Au, 0.5% Pb, 0.1% Sn			
W13	Cirque, Tolstoj	Cu, Ag, Sn, Pb	Polymetallic vein and porphyry Cu	Samples with as much as 2% Cu, 1.34% g/t Ag, 0.5% Sn
W14	Independence	Cu, Ag, Sn, Pb	Polymetallic vein	Samples with 1.7 to 2.7 g/t Au from 113 tonnes ore
W15	Candle	Cu, Pb, Ag	Polymetallic vein	Samples grading 280 g/t Cu, 18% g/t Ag, 6.8 g/t Au
W16	Ward	Cu, Pb, Ag	Polymetallic vein	Samples with as much as 0.8% Cu, 1.70% g/t Ag, 0.5% Au
W17	White Mountain	Hg	Hot-spring Hg(?)	Samples grading 5 to 20% cinnabar. Produced 3,500 flasks
W18	Nixon Fork-Medra	Hg	Hot-spring Hg	Produced 24 to 27 million g cinnabar, minor Cu and Pb
W19	Reef Ridge	Zn, Pb	(Carbonate-hosted sulfide)	181,000 tonnes grading 1% Zn and Pb
W20	Medra	Fe, Cu, Zn	Fe skarn	12,000 g/t grading 0.5% Fe, minor Cu and Zn
W21	Sisichu Creek	U, Th, REE	Felsic plutonic U	Samples with as much as 6.00% U and 0.01% Th
TOZITNA AND INNOKO AREAS, NORTHEASTERN KUSKOKWIM MOUNTAINS, WEST-CENTRAL ALASKA				
W22	Mount Hunt	Cr, PGE	Podiform chromite	Samples with 27 to 61% Cr <sub>2</sub> O <sub>3</sub>
W23	Kaipik Hills	Cr	Podiform chromite	15,000 to 34,000 Cr <sub>2</sub> O <sub>3</sub> tonnes in one deposit
WEST-CENTRAL YUKON-HOYUK BASIN, WEST-CENTRAL ALASKA				
Y24	M'Leod	Mo	Porphyry Mo	Samples grading 0.09% Mo
Y25	Illinoits Creek	Cu, Ag, Au, Pb, Zn	Polymetallic vein and porphyry Cu	No data
Y26	Perseus	Cu, Ag, Au, Pb, Zn	Polymetallic vein(?)	Produced 223 tonnes grading 1% Cu, 1% Ag, 1% Au
Y27	Beaver Creek	Ag, Pb, Zn	Polymetallic vein	14,000 tonnes grading 103 g/t Ag, 0.5% Zn, 0.5% Cu
Y28	Quartz Creek	Pb, Zn, Au, Ag	Polymetallic vein	Samples with as much as 1% combined Pb and Zn, 340 g/t Ag
NORTHERN AND EASTERN YUKON-HOYUK BASIN, WEST-CENTRAL ALASKA				
Y29	Wheeler Creek	U	Felsic plutonic U	Samples with as much as 0.012% U
Y30	Clear Creek	U, Th, REE	Felsic plutonic U	Samples with as much as 0.04% U, 0.06% Th
Y31	Zane Hill	U, Th, REE	Felsic plutonic U	Samples with as much as 0.02% U
Y32	Adobson Mountain	As, Sb, W, Hg	Serpentine-hosted asbestos	Up to 25,000 tonnes Cr <sub>2</sub> O <sub>3</sub> at Holmdale
Y33	Caribou Mountain, Colville	Cu	Podiform chromite	No data
Y34	Upper Kanuti River	Pb, Zn, Ag	Polymetallic or epithermal vein	Samples with as much as 2% Pb, 0.3% Zn, 30 g/t Ag
Y35	Bonanza Creek	W, Ag, Cu	W skarn	Samples with as much as 0.89% W, 300 g/t Ag, 0.65% Cu
MINKLEY AND LIVENGDOW AREAS, NORTHWESTERN YUKON-TANANA UPLAND, EAST-CENTRAL ALASKA				
E01	Hot Springs Dome	Pb, Ag, Zn, Au	Polymetallic vein	Samples grading 5.8 g/t Au, as much as 274 g/t Ag, 3.7% Pb
E02	Armed Creek	Ag, Au, Zn, Au	Au quartz vein	Produced 223 tonnes grading 1% Cu, 1% Ag, 1% Au
E03	Sawtooth Mountain	Sn, Au, Ag	(Mo-W vein)	Samples with as much as 34% Mo and as much as 7.6 g/t Au
E04	Gardiner Creek	Ag, Au, Pb, Sb	Sb-Au vein	Produced about 500 tonnes grading 50% Ag
E05	Griffin, Rich Creek	Ag, Au, Pb, Sb	Sb-Au vein	Samples with as much as 15% Sb, 3.9 g/t Au
E06	Madison	Sn	Sn greisen	See tab. 10
E07	Roy Creek	U, Th, REE	(Hg quartz vein)	No data
E08	Medra Valley	Sn, Ag, Zn	Felsic plutonic U	Drill core with as much as 5 to 10% REE by volume
E09	Lime Peak	Sn, Ag, Zn	Sn greisen and Sn veins	Samples with as much as 0.16% Sn, 0.5% Cu, 0.2% Pb, 1.8% Zn
NORTHERN AND CENTRAL YUKON-TANANA UPLAND, EAST-CENTRAL ALASKA				
E10	Scafford	Sb, Au	Sb-Au vein	Produced 906,000 kg Sb from 2,500 tonnes ore
E11	Clery Summit	Au, Ag	W skarn	145,000 tonnes grading 10 to 15 g/t Au
E12	Gilmore Dome	W	W skarn	20,000 tonnes grading 0.5 to 3.4% Mo
E13	Estor Dome	Au, Ag	Polymetallic vein(?)	Produced 60,700 tonnes grading 7 to 79 g/t Au
E14	Democrat	Au, Ag	Au quartz vein	No data
FAIRBANKS DISTRICT, NORTHERN YUKON-TANANA UPLAND, EAST-CENTRAL ALASKA				
E15	Scafford	Sb, Au	Sb-Au vein	Produced 906,000 kg Sb from 2,500 tonnes ore
E16	Clery Summit	Au, Ag	W skarn	145,000 tonnes grading 10 to 15 g/t Au
E17	Gilmore Dome	W	W skarn	20,000 tonnes grading 0.5 to 3.4% Mo
E18	Estor Dome	Au, Ag	Polymetallic vein(?)	Produced 60,700 tonnes grading 7 to 79 g/t Au
E19	Democrat	Au, Ag	Au quartz vein	No data
EASTERN YUKON-TANANA UPLAND, EAST-CENTRAL ALASKA				
E20	Blue Lead, Tibbo	Au, Ag, Sb	Polymetallic or Sb-Au vein	Produced 905 g Au, 707 g Ag from 136 tonnes ore
E21	Nokitok	Cu, Mo	Porphyry Cu-Mo	No data
E22	Purdy	Cu, Mo	Porphyry Cu-Mo	Minor production
E23	Asarco	Cu, Mo	Porphyry Cu-Mo	No data
E24	Bluff	Cu, Mo	Porphyry Cu-Mo	No data
E25	Taurus	Cu, Mo	Porphyry Cu-Mo	452 million tonnes grading 0.5% Cu and 0.02% Mo
E26	Madison	As, Sb, W, Hg	Serpentine-hosted asbestos	58 million tonnes grading 0.4% Fe, 0.4% Pb, 0.0% Hg
E27	Little Creek, Eagle C	PGE	Podiform chromite	Samples with 3.9% Pt, 1.5 g/t Au, 0.0% Hg
NORTH ALASKA RANGE, EAST-CENTRAL ALASKA				
E28	Slate Creek, Eagle Sn, Ag, Zn	Ag, Au, Pb, Zn	Sb-Au vein	64,000 tonnes grading 1% Sn, minor Ag, Zn
E29	Ben, Caribou Creek	Ag, Au, Pb, Zn	Sb-Au vein	380,000 tonnes grading 1.30% Ag, 4.8 g/t Au, 6.4% Pb
E30	Bajo	Au, Ag, Pb, Zn, Sb	Polymetallic vein	160,000 tonnes grading 13.4 g/t Au, 123 g/t Ag
E31	Spruce Creek	Au, Ag, Pb, Zn, Sb	Polymetallic vein	71,000 tonnes grading 2.4 g/t Au, 216 g/t Ag
E32	Stampe	Sb	Polymetallic or Sb-Au vein(?)	410,000 tonnes grading 10.5% Sn, minor Ag, Zn, Au
E33	Liberty Bell	As, Cu, Bi, Au	Kuroko massive sulfide(?)	91,000 tonnes grading 10% As, 2% Cu, 34 g/t Au, 10% As, 2% Cu
E34	Sheep Creek	Cu, Pb, Sn	Kuroko massive sulfide(?)	Samples average 11% combined Pb and Zn, 10 g/t Ag
E35	Anderson Mountain	Cu, Pb, Sn	Kuroko massive sulfide	Grades of 0.5 to 10% Cu, as much as 3% Pb, 0.8% Zn, 1.1 g/t Au
E36	WTF, Red Mountain	Cu, Pb, Zn, Ag	Kuroko massive sulfide	1.1 million tonnes grading 0.15% Cu, 2.5% Pb, 1.9% Zn, 970 g/t Au
E37	Myaska	Cu, Pb, Zn, Ag	Kuroko massive sulfide	Samples with as much as 0.92% Cu, 0.2% Pb, 0.5% Zn
E38	Deja	Zn, Cu, Pb, Ag	Kuroko massive sulfide	Samples with as much as 2.3% Zn, 0.26% Cu, 0.25% Pb, 50 g/t Ag
E39	Delta District	Pb, Zn, Cu, Ag, Au	Kuroko massive sulfide	Largest deposit of 18 million tonnes grading 0.3 to 0.7% Cu

INTERIOR—GEOLOGICAL SURVEY, RESTON, VA.—1987—G-262



Geology from Jones and others (1984b), and Menger and Berg (1984). See text for reference 11c.

Planimetric base from Geological Society of America DMAG series maps

POSTACCRETION COVER DEPOSITS			
D	Sedimentary and volcanic rocks (Cenozoic)	IN	Innoko terrane
T	Sedimentary and volcanic rocks (Tertiary)	KA	Kandik River terrane
K	Sedimentary and volcanic rocks (Upper Cretaceous)	IV	Seventyninth terrane
POSTAMALGAMATION OVERLAP ASSEMBLAGE			
GN	Gravine-Rustolin belt—Upper Jurassic to mid-Cretaceous	KI	Kahiltna terrane
TR	Tracy Arm terrane	LA	Tracy Arm terrane
ACCRETED TERRANES			
KL	Kilbuck terrane	TL	Togiak terrane
TK	Koyuk terrane	TI	Tiikhiak terrane
LY	Lyell terrane	TK	Taku terrane
AD	Colfoss suture zone of Arctic Alaska terrane	LV	Livengdow terrane
AN	North Slope suture zone of Arctic Alaska terrane	MA	Manley terrane
AZ	Endicott Mountains suture zone of Arctic Alaska terrane	ME	McKenzie terrane
AH	Hamedon suture zone of Arctic Alaska terrane	ML	Maclean terrane
AN	North Slope suture zone of Arctic Alaska terrane	MF	West Fork terrane
AK	Anagyach terrane	MM	White Mountains terrane
AA	Admiralty suture zone of Alexander terrane	MP	Wangulla terrane
AN	Nenana terrane	MY	Wickersham terrane
AN	Nixon Fork terrane	WY	Windy terrane
BY	Baldy terrane	YA	Yakutat terrane
BP	Broad Pass terrane	YK	Yukon-Tanana terrane
CG	Chukchi terrane	YT	Yukon-Tanana terrane
CH	Chukotka terrane		
CU	Cleaverly terrane		
CR	Crawley Mountains terrane		
DL	Dillingham terrane		
SE	Saint Elias terrane		
GD	Goodnews terrane		

LOCATIONS OF SIGNIFICANT METALLIFEROUS LODE DEPOSITS OF ALASKA

Number	Name	Major metals	Type	Estimated tonnage and grade—production
ALEUTIAN ISLANDS AND SOUTHWESTERN ALASKA PENINSULA				
AP1	Sedanka	Zn, Pb, Cu	Polymetallic vein	Average grade of 6.6% Zn, 0.45% Cu, 0.29% Pb, 48 g/t Ag
AP2	Canon Bay	Au, Ag, W, As, Pb	Epithermal vein	Produced 3.3 million g Au, 27 g/t Ag
AP3	Amal	Au, Ag, Cu, Zn, Cu	Epithermal vein	Produced 3.3 million g Au, 27 g/t Ag
AP4	Amal-Sitka	Au, Ag, Cu, Zn, Cu	Epithermal vein	Produced 3.3 million g Au, 27 g/t Ag
AP5	Shungin	Au, Ag, Cu, Zn, Cu	Epithermal vein	540,000 tonnes grading 10 g/t Au, 34 g/t Ag
AP6	Pyramid	Au, Ag, Cu, Zn, Cu	Epithermal vein	110 million tonnes grading 0.4% Cu, 0.05% Mo, trace Au
AP7	San Diego Bay	Au, Ag, Cu, Zn, Cu	Epithermal vein	Produced 0.4 g/t Au
AP8	Karpag	Cu, Mo, Pb, Zn	Porphyry Cu or polymetallic vein	Average grade of 0.2 to